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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/877,684	06/17/1997	GEORGE ALAN VAUGHAN	96B035/2	6303

7590 06/26/2002  
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EXAMINER	
PASTERCZYK, JAMES W	
ART UNIT	PAPER NUMBER

1755  
DATE MAILED: 06/26/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

MF-34

# Office Action Summary

Application No.  
08/877,684

Applicant(s)  
Vaughan et al.

Examiner  
J. Pasterczyk

Art Unit  
1755



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Apr 11, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 6, 13, 17-20, 22-27, 30, and 33-40 is/are pending in the application.
- 4a) Of the above, claim(s) 22-27, 30, and 33-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 13, and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 1, 6, 13, 17-20, 22-27, 30, and 33-40 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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1. This Office action is in response to the amendment filed 4/11/02 and refers to the Office action mailed 1/3/02.

2. Applicants are correct in their assertion that claims 17-20 belong in the same category for restriction purposes as claims 1, 6 and 13, hence these claims will be considered together. See paper 6 for the original restriction requirement, and paper 9, paragraph 2 for a further exposition on the restriction requirement. The other claims remain withdrawn from consideration.

3. Claims 1, 6, 13, and 17-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The present claims require a covalent bond between the metal atom and the E atoms. As applicants' "Compendium of Chemical Terminology" (no publication date given) definition of covalent bond recites, such a bond has a characteristic internuclear distance. If E were a group 15 atom, it would have a valence of 3, meaning there would be three bonds to it, all of the same nature. This would require both m and n to equal 1. If E were a group 16 atom, it would have a valence of 2, meaning there would be two bonds to it, all of the same nature. This would require both m and n to equal zero. The specification does not disclose these variables being zero. If the bonds between the metal and the E elements are of the same nature as those in Horton et al., USP 5,726,115 (of record), then they should have the same general physical parameters, including internuclear distances as noted in the reference book cited by applicants. The M-N bonds of Horton appear to be what is ordinarily

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referred to as covalent, since each N atom has only three moieties bonded to it and the N atoms are both electrically neutral. However, no such internuclear distance data is apparent in the present specification, hence it appears that the bonds between the M and E atoms are not of the same nature as those between the similar atoms in the Horton patent, or as those between the E and A or R moieties. Thus calling the bonds between M and E in the present application covalent appears to be a misnomer, and the values allowed to the variables m and n would make sense. The examples in the present specification of transition metal compounds and their attendant coordination numbers about the nitrogen atoms do not appear to correspond to the type of bonding in Horton. If the ligand L can in fact form its own stable compound, then the bonding between it and M is not what is traditionally called covalent; otherwise, the lone pairs of electrons on the E atoms would seek another lone pair to dimerize with to form a complete octet of valence electrons, then forming a stable compound compared to e.g. a carbene. This internal inconsistency gives rise to the present written description rejection. It is for this reason that the examiner suggested applicants file a CIP based on this case in order to be able to clear up this problem without risking adding new matter.


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 703-308-3497. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached on (703) 308-3823. The fax phone number for the organization where

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this application or proceeding is assigned is 703-872-9310 for normal faxes, 872-9311 for after final faxes.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Mark L. Bell  
Supervisory Patent Examiner  
Technology Center 1700



J. Pasterczyk

6/21/02